**PATENT** 

## THE UNITED STATES PATENT AND TRADEMARK OFFICE

(Attorney Docket No. 05222.00165)

In re U.S. Patent Application of Nichols, et al.	)	
	) Group Art Unit: 2121	
Application No. 09/868,752	) Examiner: Bell	
Filed: September 4, 2001	) Confirmation No. 6533	RECEIVED
For: A GOAL BASED FLOW OF A CONTROL	) Confirmation No. 6333	
Presentation System	)	MAY 1 1 2004

## INFORMATION DISCLOSURE STATEMENT

**Technology Center 2100** 

Commissioner of Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR §§1.97 and 1.98, the Applicant wishes to make the following references of record in the above-identified application. This Information Disclosure Statement is in compliance with the continuing duty of candor as set forth in 37 CFR §1.56. Copies of the references cited below are enclosed. The references are also listed on the enclosed and completed Form PTO/SB/08A.

The Commissioner is authorized to charge or credit any fees associated with this paper to Deposit Account No. 19-0733.

Under 37 CFR §1.97(g), the filing of this Information Disclosure Statement shall not be construed as a representation that a search has been made.

05/10/2004 HVUUNG1 00000108 190733 09868752 01 FC:1806 180.00 DA Under 37 CFR §1.97(h), the filing of this Information Disclosure Statement shall not be construed to be an admission that the cited references are, or are considered to be, material to patentability as defined in 37 CFR §1.56(b).

The present patent application is related to the following co-pending patent applications:

09/502,348	09/218,977	09/218,726	09/868,693	09/868,713
09/219,055	09/218,749	09/218,995	09/868,698	09/868,667
09/219,080	09/219,479	09/218,945	09/868,694	10/008,265
09/305,719	09/219,524	09/221,608	09/868,678	10/018,062
09/219,480	09/219,477	09/629,367	09/868,686	09/934,924
09/218,968	09/219,481	09/502,349	09/868,682	09/935,219
09/221,217	09/219,088	09/219,478	09/868,664	09/935,348
09/218,741	09/219,201	09/887,188	09/868,689	
09/502,142	09/219,079	10/007,824	09/868,708	
09/219,086	09/218,906	09/887,824	09/868,743	
09/221,138	09/218,976	09/887,947	09/868,669	

## Other Prior Art -- Non Patent Literature Documents

- W. Doube, "A Browser-Based System to Support & Deliver DE," 1998 FIE Conference, Conference Proceedings, Vol. 1, pp. 479-484, Nov. 4-7, 1998
- W. Regian and G.Pitts, "A Fuzzy Logic-Based Intelligent Tutoring System (ITS)," Information Processing 92, Vol. II, pp. 66-72, Dec. 1992.
- J. Reye, "A Goal-Centered Architecture for Intelligent Tutoring Systems," Proc. of 7th World Conf. on Artificial Intelligence in Education, pp. 307-314, Aug. 1995
- R. Schank and D. Edelson, "A Role for AI in Education: Using Technology to Reshape Education", Northwestern University, The Institute for the Learning Sciences, Journal of Artificial Intelligence in Education, Winter 1990, , pp. 1-24, January 1990
- A. Nowakowski, "A Special Section -- Goal Based Scenarios: A New Approach to Professional Education: Reengineering Education at Andersen Consulting," Educational Technology, pp. 3-8, Nov.-Dec. 1994
- R. Chellappa, A. Barua and A. Whinston, "An Electronic Infrastructure for a Virtual University," Communications of the ACM, Vol. 40, No. 9, pp. 56-58, Sep. 1997.

- K. Itoh M.Itami, K. Ichihara, J. Matsushita, T. Nomizo, T. Shimomura and T. Takahashi, "An Object-Oriented Architecture for Evolutional Development of Interactive Learning Environment with Coached Problem-Solving," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 592-94, Dec. 1997
- K. Nakabayashi, M. Maruama, Y. Koike, Y. Kato, H. Touhei and Y. Fukuhara, "Architecture of an Intelligent Tutoring System on the WWW," Artificial Intelligence in Education, pp. 39-46, Dec. 1997
- D. McArthur, "Artificial Intelligence and Mathematics Education" at http://www.rand.org/hot/mcarthur/Papers/aied.html, pp. 1-8, Jan. 2001
- T. Murray, "Authoring Intelligent Tutoring Systems: An Analysis of the State of the Art" at http://www.cs.umass/edu/~tmurray/papers/ATSummary/AuthTools.html, pp. 1-35, July 2001
- "Automate Your Business Plan Software" at www.business-plan.com/automate.html, pp. 1-4, July 2001
- A. Gonalez and L. Ingraham, "Automated Exercise Progression in Simulation-Based Training," IEEE Trans. On Systems, Man, and Cybernetics, Vol. 24, No. 6, pp. 863-74, June 1994
- A. Muntjewerff, "Automated Training of Legal Reasoning" at http://www.bileta.ac.uk/94papers/muntjew.html, pp. 1-7, July 2001, 9<sup>th</sup> BILETA Conference April, 1994
- "Brainmaker" at htt://people.becon.org/~echoscan/28-04.htm, July 2001
- Brainmaker Neural Network Application Examples at <a href="http://www.calsci.com/Applications.html">http://www.calsci.com/Applications.html</a>, January 2001
- C. Robinson, E. Arias and H. Eden, "Bridging the Virtual and the Physical: The InterSim as a Collaborative Support Interface," Artificial Intelligence in Education, pp. 556-58, Dec. 1997
- C. Shreiner, "CAPTOR a Model for Delivering Web-Based Intelligent Tutoring System Technology", IEEE Proc. DASC vol. 2, pp 5.C.4.1-5
- S. Prabhu, "Computer Aided Instruction for Statistics: A Knowledge-Based Systems Approach," Int'l J. of Computers in Adult Education and Training, Vol. 5(1), pp. 3-14., November 1995
- J. Montgomery, R. Campbell and C. Moffett, "Conducting and Supporting a Goal-Based Scenario Learning Environment," Educational Technology, pp. 15-20, 994
- A. Zeller and D. Lutkehaus, "DDD--A Free Graphical Front-End for UNIX Debuggers," ACM Sigplan Notices, Vol. 31, No. 1, pp. 22-27, Jan. 1996,
- Vanguard Software Corporation "Decision Pro3.0" at www.vanguardsw.com/, Jan. 2001
- B. Cheok and A. Nee, "Developing a Design System into an Intelligent Tutoring System," Int'l J. Engr. Eud., Vol. 13(5), pp-341-46, Dec. 1997

- T. Nogami, Y. Yokoi, I. Yanagisawa and S. Mitui, "Development of a Simulation-Based Intelligent Tutoring System for Assisting PID Control Learning," IEICE Transactions on Information and Systems, E77-D, No. 1, Tokyo Japan, pp. 108-117, Jan. 1994
- J. Gonzalez, J. Lopez, F. Bustio, P., Corcuera and E. Mora, "Development of an Integrated Simulator and Real Time Plant Information System," Advances in Operational Safety of Nuclear Power Plants, Proceedings of an International Symposium, pp. 543-549, September 1996.
- P. Brusilovsky, S. Ritter and E. Schwarz, "Distributed Intelligent Tutoring on the Web," Artificial Intelligence in Education, pp. 482-89, Dec. 1997
- R. Schank and M. Korcuska, "Eight Goal-Based Scenario Tools", Technical Report # 67, Northwestern University, The Institute for the Learning Sciences, pp. 1-37, January 1996
- J. Siemer and M. Angelides, "Embedding an Intelligent Tutoring System in a Business Gaming-Simulation Environment," Proc. Of the 1994 Winter Simulation Conference, pp. 1399-1406, Dec. 1994
- Engines for Education" http://www.ils.nwu.edu/~e\_for\_e/nodes/I-M-INTRO-ZOOMER-pg.html; July 2001.
- S. Taylor and J. Siemer, "Enhancing Simulation Education with Intelligent Tutoring Systems," Proc. Of the 1996 Winter Simulation Conf., pp. 675-80, Dec. 1996
- J. Siemer and M. Angelides, "Evaluating Intelligent Tutoring with Gaming Simulations," Proc. Of the 1995 Winter Simulation Conf., pp. 1376-83, Dec. 1995
- A. Mitrovic and B. Martin, "Evaluating the effectiveness of feedback in SQL-tutor", IEEE, proc. Int. workshop IWALT, pp 143-144, 2000
- D. Foster, "FRA: Teaching Financial Accounting with a Goal-Based Scenario," Intelligent Systems in Accounting, Finance and Management, Vol. 4, pp. 173-189, September 1995
- N. Livergood, "From Computer-Assisted Instruction to Intelligent Tutoring Systems," J. Artificial Intelligence in Education, V. 2(3), pp. 39-50, Dec. 1991
- R. Shank, "Goal-Based Scenarios and Business Training: A Conversation with Roger C. Schank," Educational Technology, pp. 27-29, Nov.-Dec. 1994
- A. Collins, "Goal-Based Scenarios and the Problem of Situated Learning: A Commentary on Andersen Consulting's Design of Goal-Based Scenarios," Educational Technology, pp. 30-32, Nov.-Dec. 1994
- R. Shank, "Goal-Based Scenarios", Technical Report # 36, Northwestern University, The Institute for the Learning Sciences, pp. 1-30, December 1992,
- J. Rickel, "Intelligent Computer-Aided Instruction: A Survey Organized Around System Components," IEEE Inc., New York, Vol. 49, No. 1, pp. 40-57 pp. 1-32, Jan. 1989

- M. Yazdani, "Intelligent Tutoring Systems: An Overview" Experts Systems, Vol. 3, No. 3, pp. 154-162, July 1986
- "Interactive Multimedia Instructs the Individual," Occupational Health & Safety Vol. 63, No. 10, pp. 144-145, Oct. 1994
- J. Carroll and J. McKendree, "Interface Design Issue for Advice Giving Expert Systems", Comm. Of the ACM, vol 30, No. 1, pp14-31, January 1987
- "KBLPS Overview" at www.cgi.com/CGIWEB/KBLPS/overindex4.html, August 1999
- "Kiplinger TaxCut Press Releases" at http://www.taxcut.com/taxcut/98press releases/pr98 nowshipping.html, July 2001
- G. Cole, "Learning with Computers,", Accountancy Vol. 113, No. 1209, pp. 60-64, May 1994
- J. Keys, R. Fulmer and S. Stumpf "Microworlds and Simuworlds: Practice Fields for the Learning Organization," Organizational Dynamics Vol. 24, No. 4, pp. 36-49, Spring 1996
- "MUSE Patents" OCCAM Research Corporation, at www.muser.com/html/patents.html, January 2001
- "News for ESAP" at www.hops.wharton.upenn.edu/~esap/news.html, August 1999
- M. Cohn, "No More Boring CPE," Accounting Technology, pp. 27-35, July 1997
- K. Lai, T. Malon, K. Yu, "Object Lens: A 'Spreadsheet' for Cooperative Work", ACM Transactions on Information Systems, Vol. 6, No. 4, pp. 332-353, Oct. 1988
- J. Brown, R. Burton and J. DeKleer, "Pedagogical, Natural Language and Knowledge Engineering Techniques in SOPHIE I, II, and III," Intelligent Tutoring Systems, D. Sleeman & J.S. Brown eds., pp. 227-82, Dec. 1982
- J. Caird, "Persistent Issues in the Application of Virtual Environment Systems to Training," Proceedings. Third Annual Symposium on Human Interaction with Complex Systems, IEEE, pp. 124-32, August 1996
- D. Bill, "Popular Theory Supporting the Use of Computer Simulation for Experiential Learning," http://www.centurionsys.com/rtcl57.html, pp. 1-5, July 2001
- C. Cleary and R. Bareiss, "Practical Methods for Automatically Generating Typed Links", The Institute for Learning Sciences, Northwestern University, ACM Hypertext, pp 31-41, 1996
- "Projects: FinPlan System", Russian Research Institute of Artificial Intelligence, at <a href="http://www.rriai.org.ru/FinPlan">http://www.rriai.org.ru/FinPlan</a>, July 2001
- R. Azevedo, S. Lajoie, M. Desaulniers, D. Fleiszer and P. Bret, "RadTutor: The Theoretical and Empirical Basis for the Design of a Mammography Interpretation Tutor," Proc. of 1997 World Conf. On Artificial Intelligence in Education, pp. 386-393 Dec. 1997

- T. Cooper and N. Wogrin, "Rule-Based Programming with OPS5" Morgan Kaufmann Publishers, at www.mkp.com/books\_catalog/O-934613-51-6.asp, August 1999
- R. Min, "Simulation Technology and Parallelism in Learning Environments" at http://www.to.utwente.nl/prj/min/Book/chapter1.htm, pp. 1-26, July 2001
- J. Shi, T. Smith, J. Granieri and N. Badler, "Smart Avatars in JackMOO," Proceedings of the 1999 IEEE Conference on Virtual Reality, pp. 156-163, 1999
- V. Shute, "SMART Evaluation: Cognitive Diagnosis, Mastery Learning & Remediation," Proc. of 7th World Conf. On Artificial Intelligence in Education, pp. 123-130, Aug. 1995
- C. Hafner and V. Wise, "Smartlaw: Adapting Classic Expert System Techniques for the Legal Research Domain", ACM pp 133-141, 1993
- "Socialized Collaborative Learning in Multimedia Virtual Worlds" National University of Singapore, School Computing, at http://www.comp.nus.edu.sg/labs/learning/lels/vrml.html, pp. 1-4, July 2001
- C. Whittington and L. Campbell, "Task-Oriented Learning on the Web"; Innovations in Education and Training International, Vol. 36, No. 1, pp. 26-33, Feb. 1999
- D. Foster, "Teaching Real-World Analysis Skills for Goal-Based Scenario," The Institute for the Learning Sciences, Northwestern University, pp. 68-74, July 2001
- M. Papagni, V. Cirillo and A. Micarelli, "Teaching Through Case-Based Reasoning: An ITS Engine Applied to Business Communication," Proc. of 1997 World Conf. On Artificial Intelligence in Education, pp. 111-118, Dec. 1997
- T. Herron, "Teaching with the internet" 1998, The Internet and Higher Education, pp 217-222, 1998
- D. Suthers, "Technical Report: Computer Aided Education and Training Initiative" at http://advlearn.Irdc.pitt.edu/advlearn/papers/FINALREP.html, pp. 1-51, January 1998
- Workflow Template Developing a WFT Workflow System, "Simulating the Running of the WFT Workflow System", Template Software Business Simulator, Chapter 8, pp. 1-23, 1998
- R. Schank, A. Fano, M. Jona and B. Bell, "The Design of Goal-Based Scenarios", Technical Report # 39, Northwestern University, The Institute for the Learning Sciences, pp. 1-58, March 1993
- J. Anderson and B. Reiser, "The Lisp Tutor," Byte, pp. 159-75, April 1985
- D. McArthur, M. Lewis and M. Bishay, "The Roles of Artificial Intelligence in Education: Current Progress and Future Prospects" at http://www.rand.org/education/mcarthur/Papers/role.html, pp. 1-42, July 2001

- W. van Joolingen, S. King and T. de Jong, "The SimQuest Authoring System for Simulation-Based Discovery Learning," Proc. of 1997 World Conf. On Artificial Intelligence in Education, pp. 79-86, Dec. 1997
- A, Kumar, R. Pakala, R. Ragade and J. Wong, "The Virtual Learning Environment System," 28th Annual Frontiers in Education Conference, Conference Proceedings, Vol. 2, Nov. 4-7, 1998
- M. McGee, "Train with Less Pain," at www.Informationweek.com, pp. 150 and 154 October 1997
- "TurboTax Deluxe Product Information" at http://www.intuit.com/turbotax/prodinfo/ttdlx.html, January 2001
- J. Manzoni and A. Angehrn, "Understanding Organizational Dynamics of IT-Enabled Change: A Multipedia Simulation Approach," Journal of Mangement Information Systems: JMIS, Vol. 14, No. 3, pp. 109-140, Winter 1997/1998
- "User-Sensitive Multimedia Presentation System," IBM Technical Discslosue Bulletin, Vol. 39, No. 3, pp. 93-94 March 1996
- R. Kemp and S. Smith, "Using Planning Techniques to Provide Feedback in Interactive Learning Environments," Proc. Sixth Int'l Conf. On Tools with Artificial Intelligence," pp. 700-703, November 1994
- R. Kemp, "Using the Wizard of Oz Technique to Prototype a Scenario-Based Simulation Tutor," Proc. of 1997 World Conf. On Artificial Intelligence in Education, pp. 458-465, December 1997
- R. Schank, "Virtual Learning: A Revolutionary Approach to Building a Highly Skilled Workforce," Personnel Psychology Vol. 51, No. 3, pp. 767-771, Autumn 1998
- J. Breuker, "What are Intelligent Coaching Systems and Why are they (in)evitable?" IEEE Colloquium on Artificial Intelligence in Educational Software, pp. 2/1-2/5, June 1998
- "Why Should the Teens Have All the Best Games? Management Skill with Oil, Health, Housing Games," Computergram Int'l, June 17, 1996
- E.Tam, P. Allard, M. Faraj, M. Kaddoura, A. Mourad, H. Liu, A. Malowany, R. Marceau, L. Granger and J. Gagnon, "WITS: A Reusable Architecture for a VR-Based ITS" at http://advlearn.Irdc.pitt.edu/its-arch/papers/tam.html, pp. 1-5, July 2001
- Computer Dictionary, 3rd Edition, pp. 264, 276, 383, 446, 462, 507, 1997
- L. Grensing-Prphal, "Flexible Learning", Credit Union Management Vol. 21, No. 2, pp. 32-33 and 38, Feb. 1998,
- J. Wilson and D. Mosher, "The Prototype of the Virtual Classroom," Journal of Instruction Delivery Systems, Summer 1994, at <a href="http://www.educause.edu/nlii/articles/moshwils.html">http://www.educause.edu/nlii/articles/moshwils.html</a>, pp. 1-9, July 2001

- T. Burns, "Multimedia Training... 'Get Lemonade, Not a Lemon!" Journal for Quality and Participation, Vol. 20, No. 3, pp. 22-26, June 1997,
- A. Seagren and B. Watwood, "The Virtual Classroom: Great Expectations. Delivering Graduate Education by Computer: A Success Story," 5<sup>th</sup> Annual International Conf. for Community & Technical College Chairs, Deans and Other Organizational Leaders, pp 512-517, February 1996

Dated: May 6, 2004

Respectfully submitted,

By:

Kenneth F. Smolik Registration No. 44,344

BANNER & WITCOFF, LTD.

10 South Wacker Drive

**Suite 3000** 

Chicago, Illinois 60606 Telephone: 312-463-5000 Facsimile: 312-463-5001 PE VC TO SELECTION OF THE PERSON REDUCTION OF THE PERSON REGION OF THE PERSON REGION OF REGION OF THE PERSON REGION REGION OF THE PERSON REGION REGION REGION OF THE PERSON REGION REGIO

Sheet

PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE aperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

## Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

5

Application Number 09/868,752
Filing Date September 4, 2000 CEIVE
First Named Inventor Nichols
Group Art Unit 2121 MAY 1 1 2004
Examiner Name Bell
Attorney Docket Number 005222.0016 CINOLOgy Cerriter 2100

U.S. PATENT DOCUMENTS					
Evaminar	Cite	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant
Examiner Initials *	No.1	Olle	Cited Document	Passages or Relevant Figures Appear	
_					

	FOREIGN PATENT DOCUMENTS						
Examiner Cite No.1	Foreign Patent Document		Name of Patentee or	Pages, Columns, Lines, Where Relevant			
			Publication Date MM-DD-YYYY	Applicant of Cited Document	Passages or Relevant Figures Appear	T <sup>6</sup>	

	1		
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
	1	W. Doube, "A Browser-Based System to Support & Deliver DE," 1998 FIE Conference, Conference Proceedings, Vol. 1, pp. 479-484, Nov. 4-7, 1998	
	2	W. Regian and G.Pitts, "A Fuzzy Logic-Based Intelligent Tutoring System (ITS)," Information Processing 92, Vol. II, pp. 66-72, Dec. 1992.	
	3	J. Reye, "A Goal-Centered Architecture for Intelligent Tutoring Systems," Proc. of 7th World Conf. on Artificial Intelligence in Education, pp. 307-314, Aug. 1995	
	4	R. Schank and D. Edelson, "A Role for Al in Education: Using Technology to Reshape Education", Northwestern University, The Institute for the Learning Sciences, Journal of Artificial Intelligence in Education, Winter 1990, , pp. 1-24, January 1990	
	5	A. Nowakowski, "A Special Section – Goal Based Scenarios: A New Approach to Professional Education: Reengineering Education at Andersen Consulting," Educational Technology, pp. 3-8, NovDec. 1994	
	6	R. Chellappa, A. Barua and A. Whinston, "An Electronic Infrastructure for a Virtual University," Communications of the ACM, Vol. 40, No. 9, pp. 56-58, Sep. 1997.	
	7	K. Itoh M.Itami, K. Ichihara, J. Matsushita, T. Nomizo, T. Shimomura and T. Takahashi, "An Object-Oriented Architecture for Evolutional Development of Interactive Learning Environment with Coached Problem-Solving," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 592-94, Dec. 1997	
	8	K. Nakabayashi, M. Maruama, Y. Koike, Y. Kato, H. Touhei and Y. Fukuhara, "Architecture of an Intelligent Tutoring System on the WWW," Artificial Intelligence in Education, pp. 39-46, Dec. 1997	
	9	D. McArthur, "Artificial Intelligence and Mathematics Education" at http://www.rand.org/hot/mcarthur/Papers/aied.html, pp. 1-8, Jan. 2001	
	10	T. Murray, "Authoring Intelligent Tutoring Systems: An Analysis of the State of the Art" at http://www.cs.umass/edu/~tmurray/papers/ATSummary/AuthTools.html, pp. 1-35, July 2001	
	11	"Automate Your Business Plan Software" at www.business-plan.com/automate.html, pp. 1-4, July 2001	

PE	10,03
0 4	PAR OFFICE AND STATES
MA	TO TRACE

	PATEN	TE THE PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T 2
	12	A. Gonalez and L. Ingraham, "Automated Exercise Progression in Simulation-Based Training," IEEE Trans. On Systems, Man, and Cybernetics, Vol. 24, No. 6, pp. 863-74, June 1994	
	13	A. Muntjewerff, "Automated Training of Legal Reasoning" at http://www.bileta.ac.uk/94papers/muntjewerff, 7, July 2001, 9th BILETA Conference April , 1994	IVE
	14	"Brainmaker" at htt://people.becon.org/~echoscan/28-04.htm, July 2001 MAY 1	1 200
	15	Brainmaker Neural Network Application Examples at http://www.calsci.com/Applications.html, January 399101099	Center
_	16	C. Robinson, E. Arias and H. Eden, "Bridging the Virtual and the Physical: The InterSim as a Collaborative Support Interface," Artificial Intelligence in Education, pp. 556-58, Dec. 1997	
	17	C. Shreiner, "CAPTOR a Model for Delivering Web-Based Intelligent Tutoring System Technology", IEEE Proc. DASC vol. 2, pp 5.C.4.1-5	
	18	S. Prabhu, "Computer Aided Instruction for Statistics: A Knowledge-Based Systems Approach," Int'l J. of Computers in Adult Education and Training, Vol. 5(1), pp. 3-14., November 1995	
	19	J. Montgomery, R. Campbell and C. Moffett, "Conducting and Supporting a Goal-Based Scenario Learning Environment," Educational Technology, pp. 15-20, 994	
_	20	A. Zeller and D. Lutkehaus, "DDD-A Free Graphical Front-End for UNIX Debuggers," ACM Sigplan Notices, Vol. 31, No. 1, pp. 22-27, Jan. 1996,	
	21	Vanguard Software Corporation "Decision Pro3.0" at www.vanguardsw.com/, Jan. 2001	
	22	B. Cheok and A. Nee, "Developing a Design System into an Intelligent Tutoring System," Int'l J. Engr. Eud., Vol. 13(5), pp-341-46, Dec. 1997	
	23	T. Nogami, Y. Yokoi, I. Yanagisawa and S. Mitui, "Development of a Simulation-Based Intelligent Tutoring System for Assisting PID Control Learning," IEICE Transactions on Information and Systems, E77-D, No. 1, Tokyo Japan, pp. 108-117, Jan. 1994	
	24	J. Gonzalez, J. Lopez, F. Bustio, P., Corcuera and E. Mora, "Development of an Integrated Simulator and Real Time Plant Information System," Advances in Operational Safety of Nuclear Power Plants, Proceedings of an International Symposium, pp. 543-549, September 1996.	
	25	P. Brusilovsky, S. Ritter and E. Schwarz, "Distributed Intelligent Tutoring on the Web," Artificial Intelligence in Education, pp. 482-89, Dec. 1997	
	26	R. Schank and M. Korcuska, "Eight Goal-Based Scenario Tools", Technical Report # 67, Northwestern University, The Institute for the Learning Sciences, pp. 1-37, January 1996	
	27	J. Siemer and M. Angelides, "Embedding an Intelligent Tutoring System in a Business Gaming-Simulation Environment," Proc. Of the 1994 Winter Simulation Conference, pp. 1399-1406, Dec. 1994	
	28	Engines for Education" http://www.ils.nwu.edu/~e_for_e/nodes/I-M-INTRO-ZOOMER-pg.html; July 2001.	
	29	S. Taylor and J. Siemer, "Enhancing Simulation Education with Intelligent Tutoring Systems," Proc. Of the 1996 Winter Simulation Conf., pp. 675-80, Dec. 1996	
	30	J. Siemer and M. Angelides, "Evaluating Intelligent Tutoring with Gaming Simulations," Proc. Of the 1995 Winter Simulation Conf., pp. 1376-83, Dec. 1995	
	31	A. Mitrovic and B. Martin, "Evaluating the effectiveness of feedback in SQL-tutor", IEEE, proc. Int. workshop IWALT, pp 143-144, 2000	
	32	D. Foster, "FRA: Teaching Financial Accounting with a Goal-Based Scenario," Intelligent Systems in Accounting, Finance and Management, Vol. 4, pp. 173-189, September 1995	
	33	N. Livergood, "From Computer-Assisted Instruction to Intelligent Tutoring Systems," J. Artificial Intelligence in Education, V. 2(3), pp. 39-50, Dec. 1991	

	PATEMI	THER PRIOR ART NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
	34	R. Shank, "Goal-Based Scenarios and Business Training: A Conversation with Roger C. Schank," Educational Technology, pp. 27-29, NovDec. 1994	
	35	A. Collins, "Goal-Based Scenarios and the Problem of Situated Learning: A Commentary on Andersen Consulting's Design of Goal-Based Scenarios," Educational Technology, pp. 30-32, NovDec. 1994	
	36	R. Shank, "Goal-Based Scenarios", Technical Report # 36, Northwestern University, The Institute for the Learning Sciences, pp. 1-30, December 1992,	
	37	J. Rickel, "Intelligent Computer-Aided Instruction: A Survey Organized Around System Components," IEEE Inc., New York, Vol. 49, No. 1, pp. 40-57 - pp. 1-32, Jan. 1989	
	38	M. Yazdani, "Intelligent Tutoring Systems: An Overview" Experts Systems, Vol. 3, No. 3, pp. 154-162, July 1986	
	39	"Interactive Multimedia Instructs the Individual," Occupational Health & Safety Vol. 63, No. 10, pp. 144-145, Oct. 1994	
	40	J. Carroll and J. McKendree, "Interface Design Issue for Advice Giving Expert Systems", Comm. 271 24C (1, vo. 30, No. 1, pp14-31, January 1987	IVED
	41	"KBLPS Overview" at www.cgi.com/CGIWEB/KBLPS/overindex4.html, August 1999 MAY 1	2004
	42	"Kiplinger TaxCut Press Releases" at http://www.taxcut.com/taxcut/98press_releases/pr98_nowship) பெற்ற இர	enter 210
	43	G. Cole, "Learning with Computers,", Accountancy Vol. 113, No. 1209, pp. 60-64, May 1994	
	44	J. Keys, R. Fulmer and S. Stumpf "Microworlds and Simuworlds: Practice Fields for the Learning Organization," Organizational Dynamics Vol. 24, No. 4, pp. 36-49, Spring 1996	
	45	"MUSE Patents" OCCAM Research Corporation, at www.muser.com/html/patents.html, January 2001	
	46	"News for ESAP" at www.hops.wharton.upenn.edu/~esap/news.html, August 1999	
	47	M. Cohn, "No More Boring CPE," Accounting Technology, pp. 27-35, July 1997	
	48	K. Lai, T. Malon, K. Yu, "Object Lens: A 'Spreadsheet' for Cooperative Work", ACM Transactions on Information Systems, Vol. 6, No. 4, pp. 332-353, Oct. 1988	
	49	J. Brown, R. Burton and J. DeKleer, "Pedagogical, Natural Language and Knowledge Engineering Techniques in SOPHIE I, II, and III," Intelligent Tutoring Systems, D. Sleeman & J.S. Brown eds., pp. 227-82, Dec. 1982	
-	50	J. Caird, "Persistent Issues in the Application of Virtual Environment Systems to Training," Proceedings. Third Annual Symposium on Human Interaction with Complex Systems, IEEE, pp. 124-32, August 1996	-
	51	D. Bill, "Popular Theory Supporting the Use of Computer Simulation for Experiential Learning," http://www.centurionsys.com/rtcl57.html, pp. 1-5, July 2001	
	52	C. Cleary and R. Bareiss, "Practical Methods for Automatically Generating Typed Links", The Institute for Learning Sciences, Northwestern University, ACM Hypertext, pp 31-41, 1996	
	53	*Projects: FinPlan System*, Russian Research Institute of Artificial Intelligence, at http://www.rriai.org.ru/FinPlan, July 2001	
	54	R. Azevedo, S. Lajoie, M. Desaulniers, D. Fleiszer and P. Bret, "RadTutor: The Theoretical and Empirical Basis for the Design of a Mammography Interpretation Tutor," Proc. of 1997 World Conf. On Artificial Intelligence in Education, pp. 386-393 Dec. 1997	
	55	T. Cooper and N. Wogrin, "Rule-Based Programming with OPS5" Morgan Kaufmann Publishers, at www.mkp.com/books_catalog/O-934613-51-6.asp, August 1999	

•	· /c	P.E	S TON SOURCE OF	
•		MAYO	8. 18. 18. 18. 18. 18. 18. 18. 18. 18. 1	
			8 THOOTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	
	Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		56	R. Min, "Simulation Technology and Parallelism in Learning Environments" at http://www.to.utwente.nl/prj/min/Book/chapter1.htm, pp. 1-26, July 2001	
		57	J. Shi, T. Smith, J. Granieri and N. Badler, "Smart Avatars in JackMOO," Proceedings of the 1999 IEEE Conference on Virtual Reality, pp. 156-163, 1999	
		58	V. Shute, "SMART Evaluation: Cognitive Diagnosis, Mastery Learning & Remediation," Proc. of 7th World Conf. On Artificial Intelligence in Education, pp. 123-130, Aug. 1995	
		59	C. Hafner and V. Wise, "Smartlaw: Adapting Classic Expert System Techniques for the Legal Research Domain", ACM pp 133-141, 1993	
		60	"Socialized Collaborative Learning in Multimedia Virtual Worlds" National University of Singapore, School Computing, at http://www.comp.nus.edu.sg/labs/learning/lels/vrml.html, pp. 1-4, July 2001	
		61	C. Whittington and L. Campbell, "Task-Oriented Learning on the Web"; Innovations in Education and Training International, Vol. 36, No. 1, pp. 26-33, Feb. 1999	
		62	D. Foster, "Teaching Real-World Analysis Skills for Goal-Based Scenario," The Institute for the Learning Sciences, Northwestern University, pp. 68-74, July 2001	
·		63	M. Papagni, V. Cirillo and A. Micarelli, "Teaching Through Case-Based Reasoning: An ITS Engine Applied to Business Communication," Proc. of 1997 World Conf. On Artificial Intelligence in Education, pp. 1	MED
•		64	Т. Herron, "Teaching with the internet" 1998, The Internet and Higher Education, pp 217-222, 1998	2004
		65	D. Suthers, "Technical Report: Computer Aided Education and Training Initiative" at http://advlearn.lrdc.pitt.edu/advlearn/papers/FINALREP.html, pp. 1-51, January 1998	enter 210
		66	Workflow Template - Developing a WFT Workflow System, "Simulating the Running of the WFT Workflow System", Template Software Business Simulator, Chapter 8, pp. 1-23, 1998	
		67	R. Schank, A. Fano, M. Jona and B. Bell, "The Design of Goal-Based Scenarios", Technical Report # 39, Northwestern University, The Institute for the Learning Sciences, pp. 1-58, March 1993	
		68	J. Anderson and B. Reiser, "The Lisp Tutor," Byte, pp. 159-75, April 1985	
		69	D. McArthur, M. Lewis and M. Bishay, "The Roles of Artificial Intelligence in Education: Current Progress and Future Prospects" at http://www.rand.org/education/mcarthur/Papers/role.html, pp. 1-42, July 2001	
		70	W. van Joolingen, S. King and T. de Jong, "The SimQuest Authoring System for Simulation-Based Discovery Learning," Proc. of 1997 World Conf. On Artificial Intelligence in Education, pp. 79-86, Dec. 1997	
		71	A, Kumar, R. Pakala, R. Ragade and J. Wong, "The Virtual Learning Environment System," 28th Annual Frontiers in Education Conference, Conference Proceedings, Vol. 2, Nov. 4-7, 1998	
		72	M. McGee, "Train with Less Pain,"at www.Informationweek.com, pp. 150 and 154 October 1997	
		73	"TurboTax Deluxe Product Information" at http://www.intuit.com/turbotax/prodinfo/ttdlx.html, January 2001	
		74	J. Manzoni and A. Angehrn, "Understanding Organizational Dynamics of IT-Enabled Change: A Multipedia Simulation Approach," Journal of Mangement Information Systems: JMIS, Vol. 14, No. 3, pp. 109-140, Winter 1997/1998	
		75	"User-Sensitive Multimedia Presentation System," IBM Technical Discslosue Bulletin, Vol. 39, No. 3, pp. 93-94 March 1996	
		76	R. Kemp and S. Smith, "Using Planning Techniques to Provide Feedback in Interactive Learning Environments," Proc. Sixth Int'l Conf. On Tools with Artificial Intelligence," pp. 700-703, November 1994	
		77	R. Kemp, "Using the Wizard of Oz Technique to Prototype a Scenario-Based Simulation Tutor," Proc. of 1997 World Conf. On Artificial Intelligence in Education, pp. 458-465, December 1997	

	PATEN	T& THOTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
	78	R. Schank, "Virtual Learning: A Revolutionary Approach to Building a Highly Skilled Workforce," Personnel Psychology Vol. 51, No. 3, pp. 767-771, Autumn 1998	
	79	J. Breuker, "What are Intelligent Coaching Systems and Why are they (in)evitable?" IEEE Colloquium on Artificial Intelligence in Educational Software, pp. 2/1-2/5, June 1998	
	80	"Why Should the Teens Have All the Best Games? Management Skill with Oil, Health, Housing Games," Computergram Int'l, June 17, 1996	
	81	E.Tam, P. Allard, M. Faraj, M. Kaddoura, A. Mourad, H. Liu, A. Malowany, R. Marceau, L. Granger and J. Gagnon, "WITS: A Reusable Architecture for a VR-Based ITS" at http://advlearn.lrdc.pitt.edu/its-arch/papers/tam.html, pp. 1-5, July 2001	
	82	Microsoft Press, Computer Dictionary, 3rd Edition, pp. 264, 276, 383, 446, 462, 507, 1997	
	83	L. Grensing-Prphal, *Flexible Learning*, Credit Union Management Vol. 21, No. 2, pp. 32-33 and 38, Feb. 1998,	
	84	J. Wilson and D. Mosher, "The Prototype of the Virtual Classroom," Journal of Instruction Delivery Systems, Summer 1994, at <a href="https://www.educause.edu/nlii/articles/moshwils.html">https://www.educause.edu/nlii/articles/moshwils.html</a> , pp. 1-9, July 2001	
	85	T. Burns, "Multimedia Training 'Get Lemonade, Not a Lemon!" Journal for Quality and Participation, Vol. 20, No. 3, pp. 22-26, June 1997,	
	86	A. Seagren and B. Watwood, "The Virtual Classroom: Great Expectations. Delivering Graduate Education by Computer: A Success Story," 5 <sup>th</sup> Annual International Conf. for Community & Technical College Chairs, Deans and Other Organizational Leaders, pp 512-517, February 1996	

**RECEIVED** 

MAY 1 1 2004

Technology Center 2100